

DESCRIPTIONS OF TWO NEW SPECIES OF NORTH AMERICAN
BOMBYCIDAE.

BY HERMAN STRECKER.

Cossus Orc.

♂ Light grayish. Antennæ pectinated. Head and thorax heavily clothed with coarse, dark brown and whitish scales; abdomen with grayish hair, beneath somewhat paler.

Primaries. Ground color light gray but more or less suffused with brownish especially on the basal two-thirds. The whole wing is striated, mottled might almost be the better term, with fine intersecting lines of various thickness which connect and interlace producing a curious and notable effect; there is a sort of submarginal jagged band (but scarcely deserving to be so-called) formed by the lines there being heavier; there is also conspicuous mottling interior to the middle of the wing produced by the same cause. The mottling, for it is more mottled than striated, is unlike that of any other species I know of whether native or foreign and will readily and strikingly distinguish this from all others. Secondaries gray, reticulated with fine lines, but with little of the tendency to semitransparency that is shown in some other species.

Expands $2\frac{1}{4}$ inches.

The ♀ is like the ♂ but broader winged and expanding 3 inches. The antennæ but very slightly pectinated. This is a true *Cossus* nearer to the European *ligniperda* which it more resembles, except in the style of mottling of the wings, than any species occurring in this country.

Hab. State of Washington; captured by Prof. O. B. Johnson from whom I received it.

Hepialus Los.

Head and body unicolorous pale smoky gray, tarsi pinkish.

Primaries same color as head and body with four dark grayish-brown somewhat oval almost connected spots extending from costa at base obliquely to the inner margin about two-thirds the distance from the base, a small silver spot or dot is the second of these from the costa. On the inner margin another not so conspicuous spot, on the costa two spots or marks, one at the middle and the other interior to it, beyond the first of these, commencing at the costa, an irregular

band which extends inward half way between the costa and interior margin. A large subapical patch only partially separated from the broad exterior marginal band by a broken irregular patch of the paler ground color, this marginal band encloses a paler semi-band on the inner half, and a row of pale lunate spots on the margin which are largest at the anal angle and become smaller and more indistinct the nearer they approach the apex. All the dark spots, etc., are margined with a lighter color. In the centre of the subapical patch is a small round silver dot, on the marginal band interior to the latter two very small silver marks.

Secondaries almost uniform smoky gray, darker toward apex near which, touching outwardly on the costa, is a pale elongate mark. A row of indistinct lunules at exterior margin.

Expands nearly 4 inches. Taken near Bangor, Maine.

This differs from other known North American species which I here diagnose.

Hepialus argenteomaculatus Harris, Cat. Ins. Mass., p. 72, 1864.

A pale olivaceous species with darker bands, etc., inclining in part to a golden tinge, occurring from Maine to Wisconsin, and in Canada.

H. argentata Pack., Proc. Ent. Soc. Phil. III, p. 392, 1864.

I know only by the description which leaves little doubt but that it was founded on a dark example of the preceding.

H. quadriguttatus Grote, l. c., p. 73, t. 1, f. 6, 1864.

The large yellowish salmon colored species found in Maine and New Hampshire. In Can. Ent., Vol. XXV, p. 124, 1893, it has been claimed that this insect was never really described and that *Quadriguttatus* is synonymical with *argenteomaculatus*. On this assumption it was there described as *argent.* var. *semiauratus* n. v. but on looking carefully at Grote's description it will be seen that it fits the salmon colored species at least as well as the other and his figure undoubtedly represents that one. His description says plainly "Posterior wings entirely pale salmon color" etc. "Abdomen pale salmon color"; etc. "Under surface of both wings tinged with salmon color." Now none of this applies to *argenteomaculatus* which has grayish or pale ochraceous brown posterior wings and abdomen, and whose under surface is also ochraceous or brown, varying in depth of color in different examples but entirely destitute of any indication of the fleshy red tint known as salmon-color—from this it seems

easily to be seen that there are very insufficient if any grounds for the sinking of Grote's name, or for making this, his species, a var. of Harris', as any one will see by comparing a suite of the two that they are very different in size and color and in markings, as much as is the case with species of the same group in this interesting family. I have received *argenteomaculatus* from Maine, Canada, New York, Michigan, Illinois and Wisconsin. *Quadriguttatus* only from White Mts. of New Hampshire and Maine. In the last named State the two occur at same time and in same localities.

H. purpurascens Pack., Bost. Jour. Nat. Hist., p. 598, 1863.

Unknown probably save from the type and description. I have never seen the former, but from the description it must be a large species ("expands 4.20 inches") unique in appearance it being described as "dark sable brown with irregular bands of silvery purple. Head and body deep sable brown", etc. It was "captured by Mr. S. H. Scudder at the base of Mt. Washington" and is a ♀.

H. thule Streck., Lep. Rhop. Het, p. 105, t. XII, f. 6, 1875.

A large white species with but little of the usual ornamentation on primaries and that little confined mostly to inner half of costal part. The type was taken in a park in Montreal by the late Mr. F. B. Caulfield of that city from whom I received it. Another was taken later, I think near the same city, and a third one was captured in Wisconsin. The remaining species of North American Hepialidæ of small size and, excepting *auratus* Grote, are inconspicuous insects presenting little affinity in appearance to those here enumerated.